

ELASTID

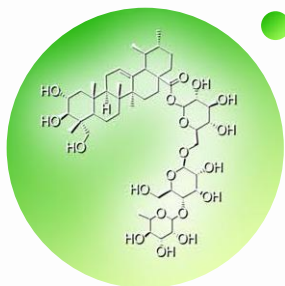
Stretch Marks: Prevention and Recovery

White Scars: Remedy and Reduction

Regain your True Skin Elasticity

ASIATICOSIDE

- **Improve activity of Normal Fibroblasts**
Red Stretch Marks Improvement
- **Reduce activity of Overactive Fibroblasts**
White Scars Prevention and Reduction
- **Improve Skin Elasticity**
Reduce Stretch Marks formation



▶ ELASTID | Regain your True Skin Elasticity

Skin stretching and injuries create tearings in the dermis producing open wounds or stretch marks. In this situation normal cell-to-cell contact and signalling are altered and fibroblasts are over-activated to repair the damage synthesizing and depositing more collagen and elastin (ECM proteins) than necessary producing scars.

Striae Rubrae - Red Marks



Striae Albae - White Marks



White Scar after Injury

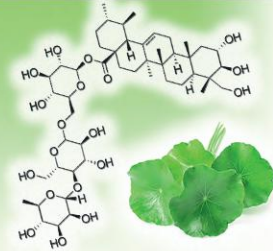


ELASTID: Pure Asiaticoside (≥95%) encapsulated inside Ultra-Deformable Niosome
Accelerate dermal matrix repair and slows down scar formation

▶ ACTIVE INGREDIENT SOURCE

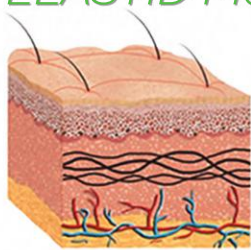
Pure Asiaticoside (≥95%)

Asiaticoside is the most active molecule extracted from *Centella Asiatica* - an ancient medicinal herb used for centuries in the treatment of scars - in enhancing the tensile strength and wound healing activity of the skin by stimulation of ECM proteins synthesis.

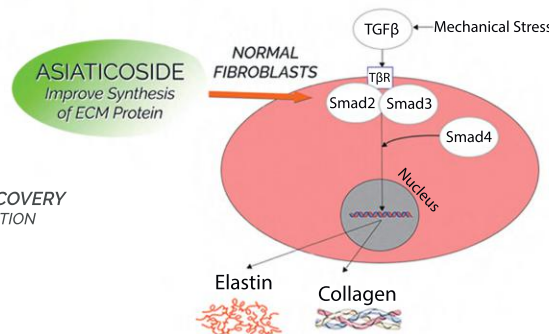


ASIATICOSIDE induces Collagen and Elastin synthesis to promote natural skin healing process

▶ ELASTID Mechanism of Action



In Physiological Conditions ASIATICOSIDE activates SMAD2/3 Improving Stretch Marks Healing

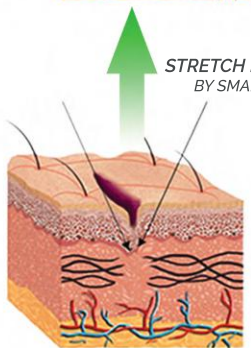


In physiological conditions, mechanical stress on the skin induces Collagen and Elastin synthesis through TGFβ/SMAD pathway.

TGFβ binds the Tβ-Receptor on the surface of fibroblasts activating intracellular Tyrosine-Kinase enzyme that phosphorylates SMAD2/3 proteins.

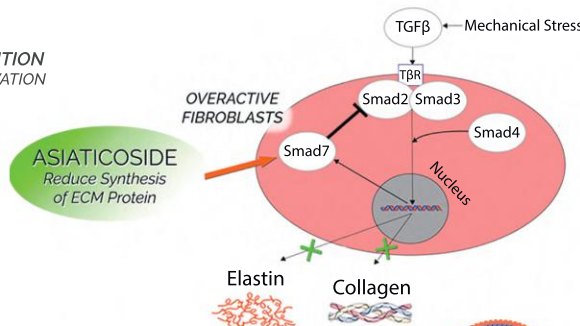
Smad2/3 complex with Smad4 and translocate inside the nucleus to activate the genes involved in the expression of Collagen I and Elastin proteins (ECM proteins).

Asiaticoside induce the expression of SMAD2/3 independently of TGFβ activation increasing the expression of ECM proteins.



STRETCH MARKS RECOVERY BY SMAD2/3 ACTIVATION

In Altered Conditions ASIATICOSIDE activates SMAD7 Reducing Skin Scars



In altered conditions, Smad7 protein, which normally prevent excessive Smad2/3 activation, is not able to control ECM proteins expression through a negative feedback loop.

A dysregulation of the correct signaling results in overexpression and altered deposition of ECM proteins producing scars or white stretch marks.

In this situation, Asiaticoside induce the expression of SMAD7 reducing excessive deposition of ECM proteins to prevent the formation of scars on the skin.

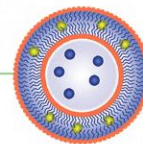
TGFβ : Transforming Growth Factor β
TβR: TGFβ Receptor
SMAD: Small Mother Against Decapentaplegic



SCAR PREVENTION BY SMAD7 ACTIVATION

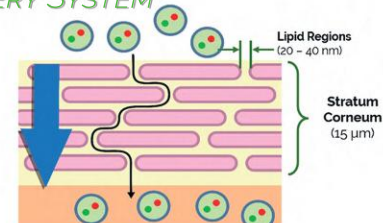
▶ ULTRA-DEFORMABLE NIOSOME

Boost IN VIVO efficacy of encapsulated active ingredients by improving penetration through the impermeable barrier of Stratum corneum



Ultra-Deformable Vesicle are elastic vesicles able to penetrate Stratum corneum through its narrow gaps (around 40nm) without breaking to reach living cells inside epidermis and increase the bioavailability of active ingredients, therefore their efficacy.

THE MOST ADVANCED SKIN DELIVERY SYSTEM

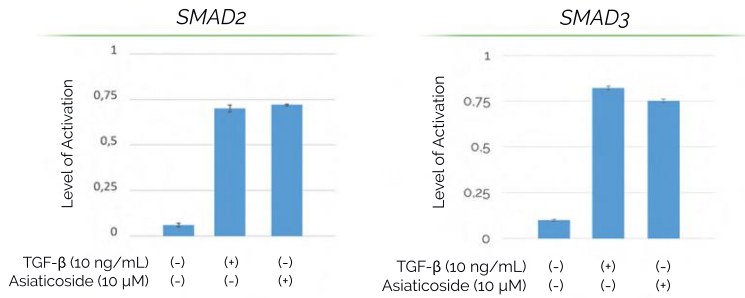


▷ EFFICACY In Vitro

Asiaticoside Improve Fibroblast Activation in Physiological Condition

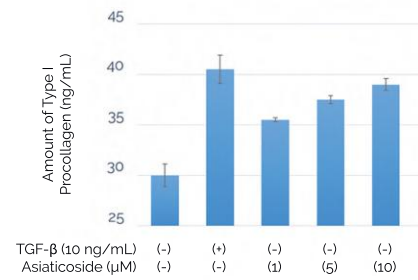
● Level of Smad2 and Smad3 Proteins in Normal Fibroblasts

Western Blot Analysis of Smad2 and Smad3 by normal fibroblasts in presence of TGF- β or Asiaticoside



● Collagen Production by Normal Fibroblasts

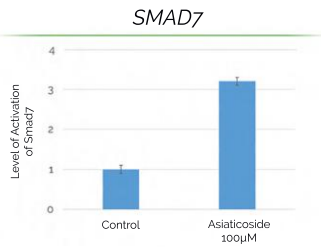
Quantitative assay of type I collagen expression by normal fibroblasts in presence of TGF- β or Asiaticoside



Asiaticoside Reduce Fibroblast Activity in Altered Conditions

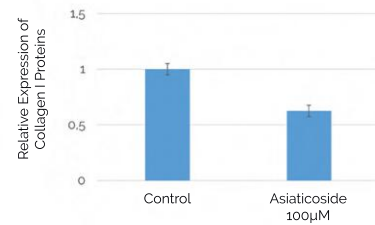
● Level of Smad7 Proteins in Overactive Fibroblasts

Western Blot Analysis of Smad7 expression by overactive fibroblasts in presence of Asiaticoside



● Collagen Production by Overactive Fibroblasts

Western Blotting of type I collagen expression by overactive fibroblasts in presence of Asiaticoside



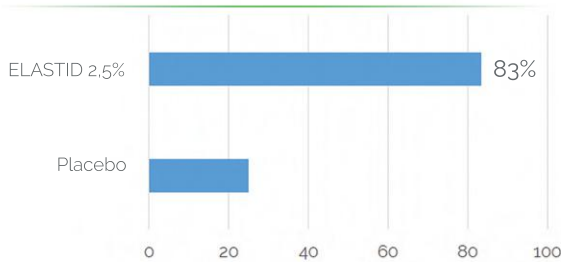
▷ EFFICACY In Vivo

Skin Penetration improved by *Niosome Delivery System*

● Recovery Improvement of Red Stretch Marks

Self Assessment of Red Stretch marks appearance applying 2.5% ELASTID vs Placebo twice daily for 4 weeks

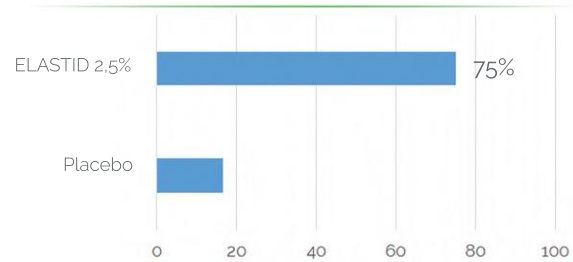
Red Stretch Marks Treatment Satisfaction



● Reduction of Scar Appearance

Self Assessment of Scar Appearance applying 2.5% ELASTID vs Placebo twice daily for 4 weeks

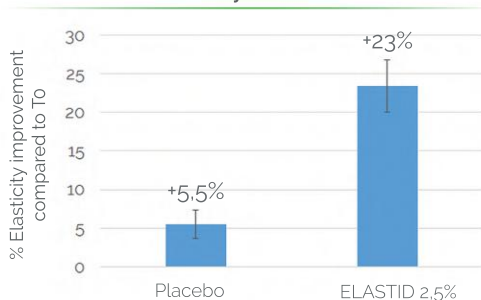
White Scars Treatment Satisfaction



● Skin Elasticity Improvement

Measurement of Skin Elasticity using Cutometer applying 2.5% ELASTID vs placebo twice daily for 4 weeks

Skin Elasticity Measurement



Red Stretch Marks Treatment



White Scars Treatment



The improvement of skin elasticity can reduce the formation of stretch marks

ELASTID

ELASTID IS THE ACTIVE INGREDIENT FOR STRETCH MARKS TREATMENT AND SCAR-FREE WOUND HEALING DEVELOPED IN NATURALIS LABORATORIES FOR DERMOCOSMETIC APPLICATIONS

Main Components

- Asiaticoside
- Niosome Delivery System

Applications

- Stretch Marks Prevention and Recovery
- Scar Reduction
- Skin Elasticity Improvement

Technical Informations

INCI name: Asiaticoside, Polyglyceryl-10 Laurate, Polyglyceryl-6 Oleate, Sorbitan Oleate, Aqua/Water

Origin: Natural

Dosage: 1,0%-2,5%

Solubility: Dispersible in Water Phase

Applications: Lotions, W/O and O/W emulsions, Gels

Storage: Store the product in the original, well closed container, in a cool, dry area and protected from light

Compliant Regulation: US - EU - China - Japan

Safety & Toxicity: Reference COMMISSION REGULATION (EC) No 987/2008 of 8 October 2008 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH):

- non-irritating
- non-toxic

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